Fond du Lac Band of Lake Superior Chippewa

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Reservation Business Committee

April 2, 2018

By Email

Colonel Sam Calkins Commander U.S. Army Corps of Engineers St. Paul District 180 East 5th Street, Suite 700 St. Paul, MN 55101

Chad Konickson Chief, Regulatory Branch US Army Corps of Engineers St. Paul District 180 East 5th Street, Suite 700 St. Paul, MN 55101

Re: PolyMet - NorthMet project - delineation of wetlands

Gentlemen:

I write to follow up on my letter of February 12 (to which, other than a confirmation of receipt, we have not received any response), to advise you of additional concerns related to the delineation of wetlands at the PolyMet NorthMet project Mine Site, and to formally request a meeting with you and other Corps officials and staff to discuss the wetlands delineation issues.

As you know, the Fond du Lac Band has deep concerns about the adverse impacts and risks of the proposed development of the PolyMet mine. These have been detailed in extensive comments that the Band has submitted to the Corps as the project has been under review. Among the issues of concern is the extent to which the proposed mine would destroy and damage wetlands - a key issue in the Corps' decision on PolyMet's application for a permit under section 404 of the Clean Water Act.

Because of these concerns, the Band, with expert assistance from Dr. John Coleman of the Great Lakes Indian Fish and Wildlife Commission, undertook additional work to aid in the proper delineation of the wetlands at the project site. Dr. Coleman provided his work to the Corps last August, and the Corps expressed an intent to evaluate his analysis, including a site visit which we understand occurred in September.

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As described in my letter of February 12, our staff and Dr. Coleman have made repeated requests that the Corps advise them of the results of the Corps' review of Dr. Coleman's analysis. But since November 1, when the Corps informed us that the Corps was still evaluating Dr. Coleman's analysis and promised to provide us with further information, we have heard nothing from the Corps. In particular, we received no response to our further requests, in our staff's emails of last December 20 and January 3, and my letter of February 12, for an update on the Corps' evaluation and an opportunity to discuss that evaluation.

Throughout this process, we and Dr. Coleman have been left in the dark about how the wetlands delineation analysis is being done. In response to Dr. Coleman's analysis, the Corps planned and undertook a field review of the wetlands on the federal lands at the proposed Mine Site. The purpose of the field review was to ground-truth Dr. Coleman's analysis. Although the Corps initially invited Dr. Coleman to participate, and Dr. Coleman expressed his interest in and availability to participate, the Corps subsequently withdrew the invitation solely because PolyMet objected. We fail to see why the Corps or the Forest Service would accede to PolyMet's objection, when the lands at issue are owned by the federal government, and the site visit necessary to assess the terms and conditions of a federal permit that PolyMet needs if it is to be allowed to build the mine.

We have since learned (as a result of information obtained in response to FOIA requests), that the two-day field review done by the Corps and PolyMet's consultant, Barr Engineering, in September involved visiting a sample of discrete areas of the Mine Site. These areas totaled less than 31 acres, a small fraction of the 3,014.5-acre Mine Site. This review is described in a December 19, 2017 memorandum from Barr to the Corps.

Even this limited review confirmed Dr. Coleman's analysis that the wetlands delineation set out in the FEIS understates the acreage of wetlands inside the mine site and those that would be directly destroyed by the mine. In its December 19 memo, Barr admits this, but then insists that the overall impact is small (concluding there are only 19.76 additional acres of wetlands, less than 1.5% of the wetlands at the mine site). Barr's conclusion is incorrect and continues to underestimate the adversely affected wetlands. The additional 19.76 acres of wetlands are only those found as a result of a review of the sampled sites (not all of which were actually visited in the field. 1) The conclusions reached regarding the sampled sites still need to be extrapolated to the whole site – a step not done in Barr's December 19 memo. If anything, the samples sites confirm that, under the LiDAR technique described in his August 2017 memorandum, Dr. Coleman's analysis was correct 85% (22/26 areas visited) of the time in identifying

In its December 19 memorandum, Barr includes a table of an analysis of 28 sites. But only 22 of these sites were actually visited in the field. Barr apparently did a desktop analysis for the remainder.

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new areas that contained some wetlands. A rough extrapolation could well mean an increase of 18.5% additional wetlands beyond what PolyMet had previously identified.

A proper extrapolation to the entire mine site however requires additional information. For instance, neither the December 19 memorandum nor any other records we have been able to view, describes how the Corps selected these sample areas or whether Barr was involved in that decision. We do not know if the sampled sites represent a random sample, or stratified random sample, or, if something else, the criteria used to select the samples. The December 19 memorandum also does not describe how the field review of these areas was undertaken. The sample areas are polygons, with center-points identified. Was the field examination limited to the center-point, or did the parties walk the perimeter? If it was not possible to walk the perimeter of all polygons, how were determinations made of what portions of each polygon were and weren't wetlands? The December 19 memo states only that GPS was used to "navigate" to each area and that "[w]etland/upland boundaries identified during the field interview were mapped" with a GPS unit.

Additionally, based on the December 19 memorandum, Barr is placing considerable, and misplaced, reliance on the Nationwide Wetlands Inventory (NWI) for Minnesota. The NWI is only a starting point, which must be verified by a field analysis in order to support a reliable wetlands delineation. NWI provides general information which can suggest that a wetland could be present. It is based upon remotely sensed features of lands, that may infer the hydrology of those lands. To verify the actual presence of wetlands, those parameters must then be ground-truthed by examination of the soils, vegetation, and hydrology of the lands in question. Although NWI can suggest that a wetland is present because the topography or cover type of a given area indicate the existence of a wetland, that suggestion needs to be validated in order to accurately determine the boundaries and extent of a jurisdictional wetland for which the Corps is responsible. The LiDAR approach conducted by Dr. Coleman, as confirmed by the limited September 2017 site visit, demonstrates the importance of such ground-truth work.

We understand, from information provided by the Forest Service to us in March, that the Corps has called upon Barr to do a further analysis and that, as of early March, a final report from Barr had not yet been submitted to the Corps. For the reasons discussed above, the Band and Dr. Coleman should not continue to be kept in the dark about how the site visit was done, how Barr is analyzing the data collected during the site visit, or how the Corps will evaluate any report that Barr produces. At the very least, the field visit indicates that the methodology and accuracy of Barr Engineering's analysis must be critically reviewed, and the Band with Dr. Coleman should be consulted and involved in that analysis. The magnitude and significance of the permitting decision that the Corps faces for the proposed PolyMet project demands accuracy and transparency in this most basic evaluation of direct wetlands impacts.

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I emphasize that the Corps' policies recognize the importance of consultation and the trust responsibility that the federal government has to Indian Tribes. The Fond du Lac Band has worked extensively over the years to ensure that the Band, in our government-to-government dealings, brings to the Corps' attention not only issues of concern that affect our rights and interest, but also the scientific analysis that bears on those issues, and which serves our shared interests in ensuring compliance with the law. The Band's requests for information and a meeting on wetlands delineation are part of those efforts, and the Corps should honor their end of the government-to-government relationship by answering those requests.

For those reasons, the Corps' evaluation of Dr. Coleman's August 2017 analysis and any independent analysis of his conclusions should not be done without further discussion with our staff and Dr. Coleman. I once again ask that the Corps respond to our repeated requests for information about the status of the Corps' review and meet with our staff and Dr. Coleman as soon as possible to discuss the Barr December 19 memorandum, the Corps' review of it and any additional work being conducted or contemplated.

Sincerely,

Kevin Dupuis, Sr.

Chairman